



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2004AK25B

Title: Monitoring Thermokarst Evolution at Caribou-Poker Creeks Research Watershed

Project Type: Research

Focus Categories: Hydrology

Keywords: thermokarst, grain size distribution, sediment transport, mapping

Start Date: 03/01/2004

End Date: 03/01/2005

Federal Funds Requested: \$10,824

Non-Federal Matching Funds Requested: \$5,455

Congressional District: AK

Principal Investigator:
Horacio Toniolo

Abstract

The Caribou Poker Creeks Research Watershed has been studied for more than two decades by researchers at the University of Alaska Fairbanks. Recent observations have indicated the development of thermokarsts in several sectors of the watershed (Hinzman, personal communication). The goal of this research is to monitor the spatial and temporal evolution of such features. This goal will be accomplished by performing topographic surveys and using a close-range photogrammetry system to obtain 3D views. Granulometric distributions will be determined by conducting surface soil sampling.